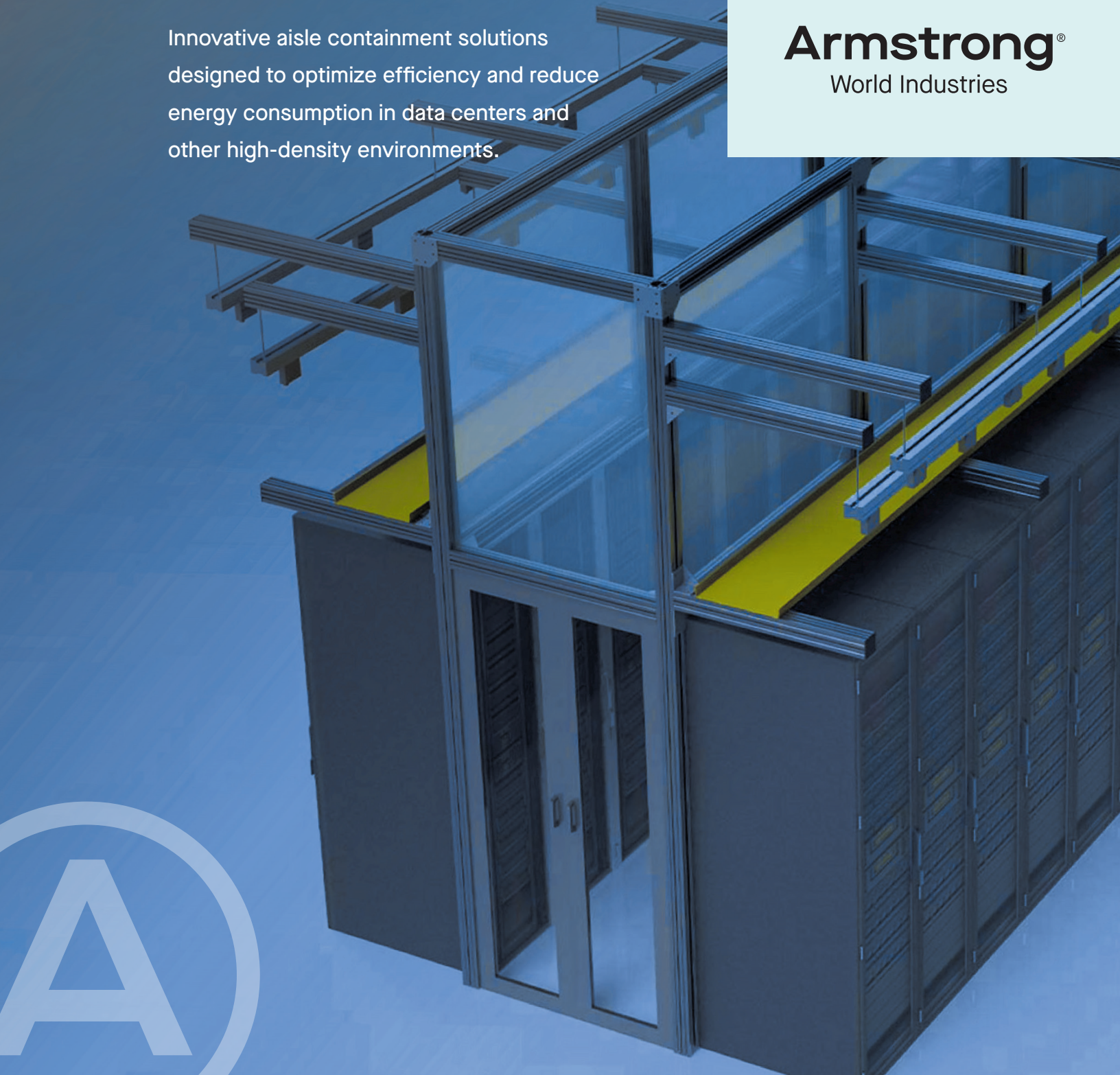




Leading Aisle
Containment
Solutions:
Enhancing Data
Center Efficiency
& Sustainability

Innovative aisle containment solutions
designed to optimize efficiency and reduce
energy consumption in data centers and
other high-density environments.

Armstrong®
World Industries





The Cool Shield™ aisle containment system is the most versatile solution in the industry. Several unique framing channels are designed to provide maximum airflow management while minimizing installation time. Since every data center and project is unique, components are custom cut and often pre-assembled in our factory. This tailored approach allows Cool Shield customers to get the most out of their aisle containment investment.

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World Industries

In addition to being highly functional and customizable, Cool Shield is extremely cost competitive. We stock price-significant quantities of our proprietary multi-functional frames and components. This volume allows Cool Shield to meet nearly any design requirement at a favorable price point.

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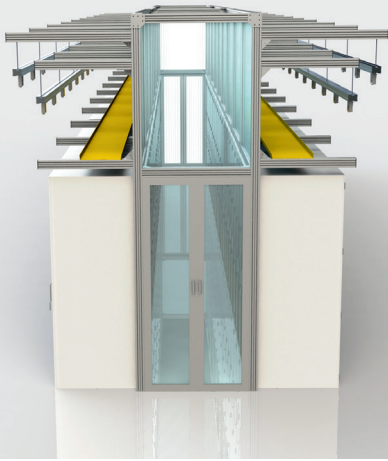
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Containment Solutions

The Cool Shield aisle containment system consists of uniquely designed standard components which have evolved over the course of helping hundreds of customers get the most out of their cooling infrastructure. As a result, every containment project is unique and presents new challenges which enable us to enhance and customize our design to extend the capabilities of our solutions. Above all, the Cool Shield proprietary extrusions are the heart of the system. Each of our more than a dozen aluminum profiles features combinations of threaded and slotted sides which allows for maximum versatility and ease of installation. Accordingly, Cool Shield optimizes Hot Aisle Containment (HAC) or Cold Aisle Containment (CAC) systems for the unique specifications and site conditions of any data center.

Aisle containment is an important environmental control standard in the data center industry, minimizing the risk of overheating servers and sensitive electronics and reducing energy costs.



Lite Frame Vertical Panels

Fixed Framed panels are factory installed to minimize onsite installation. Our panel frames are designed to allow for multiple methods of attachment and sealing in every direction.



Dual Frame Sliding Panels

Dual Slide Frames are designed to provide exceptional sealing from server cabinets to ceiling without restricting access to the cables behind the containment areas.



Drop Away Ceiling Panels

Ceiling panels span across server cabinets in cold aisles. Clear inserts are UL® rated to melt away at 135 degrees. Support frame features retention flange to allow panels to lift off to access cables and lighting.



Cabinet Filler Panels

Cabinet Filler Panels are often sized to the server cabinet height to temporarily seal empty rack positions until the cabinets are deployed.



Vertical Baffle Panels

Baffle panel provide partial height hot or cold aisle containment. Easy to install with magnetic attachment to cabinets. Panels extend to 18" below ceiling to prevent adjusting fire suppression.



Strip Curtains and Strip Curtain Walls

Fire rated flexible strip curtains provide cost-effective and versatile containment in existing data centers. Magnets and weights can be used to minimize gapping due to air pressure.



Heavy-duty Aisle Containment Structure

Designed to support critical infrastructure including cable trays, busbars and more. Provides unlimited configurability so you can customize to your unique application.



Modular Framed Walls

Custom-sized Modular Framed Containment Walls create a floor-to-ceiling barrier. The barrier divides large spaces to improve cooling efficiency or create work zones.

Lite Frame Vertical Panels



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Lite Frame Vertical Panels



Solid fixed vertical partitions seal airflow in the hot aisle or cold aisle of a data center. Cool Shield aisle containment fixed vertical panels are a very attractive and efficient method for managing the airflow in hot aisle or cold aisle containment applications. Our proprietary Cool Shield channel is designed to tightly frame the panels for a very effective seal. Panel options (and fire ratings) for our channel include twin-wall polycarbonate (E84 Class 1), solid polycarbonate (UL® 94), CPVC (FM Global), and metal. Most are offered in clear, translucent or opaque. Panels are made to size and pre-assembled at our factory for fast on-site installation.

Features

- Pre-assembled at factory to minimize installation time
- Multiple panel materials to meet budget or fire-rating requirements
- Panels framed by proprietary Cool Shield™ channel for maximum rigidity and seal
- Solutions for mounting to strut, channel, beams, ceiling grid, cabinets or floor
- Clear panels for high light transmission
- Integrated threaded and slotted channels allow for numerous brackets, brush strips, gaskets and strip curtains for optimizing air seal

Specifications

- UL® 94, ASTM E84 Class 1 and FM Global fire ratings available
- Proprietary channel features threaded and slotted sides for maximum flexibility
- Gasket, brush, or strip curtains to cabinet tops
- Vertical foam gasket between panels for airtight seal
- Containment panel system can seal in excess of 98% of airflow
- Lightweight extrusion is only .40 lbs. per linear foot
- Frame accepts 6mm panels

Dual Frame Sliding Panels



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Dual Frame Sliding Panels



Features

- Integrated double track system allows for one or two panels to be framed
- Overlap panels to create slide feature for access to data cables or power cords
- Optional handles allow for easy sliding action
- Integrated threaded and slotted channels for numerous sealing and mounting options

Specifications

- Panel inserts with UL® 94, ASTM E84 Class A and FM Global fire ratings available
- Panels pre-assembled in factory with desired brush and gasket options
- Rubber, foam, and brushes fit into slots on all four sides for maximum seal
- Cool Shield™ Dual Frame available with anodized (clear, black) or painted finish
- Frame accepts one or two 8mm panels

Most vertical containment panels limit access to cable trays and power busways. In some cases, blocking access to busbar power off switches are against electrical codes.

The Dual Slide Frame solution eliminates that issue. The robust but lightweight frames can accept one or two 8mm panels. This allows for overlapping two panels so technicians can simply slide one of the panels over to reach through the containment (hot aisle or cold aisle) area. Once work is complete, the panel can be returned to the closed position for full containment.

Drop Away Ceiling Panels



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Drop Away Ceiling Panels



Features

- Clear lightweight panels for high light transmission
- Panels can be individually lifted to access lights or cables
- Panel will not prevent installed fire suppression system from dispersing as designed
- Support frame features retention flange to hold panels in place will allowing them to be easily removed
- Framed panels are pre-assembled at factory for easy installation

Specifications

- UL® listed and FM approved for installation beneath fire sprinklers
- Class A fire rated ASTM E84-11a
- **Weight:** 0.75 lbs.
- **Color:** Clear also available: white, sand, latte, merlot, black
- **Material:** Feather-light, recyclable, 0.013" thick rigid vinyl

The Cool Shield™ shrink drop panels are UL® listed be used under fire suppression sprinkler heads. Panels are supported by 2" x 2" frame with 1 1/2" retention flange to keep panels in place. This allows panels to be lifted off individually to access lights or cabling above. Framed panels feature a gasket between panels for airtight seal. Retaining brackets keep panels in place but allow for removal to access lights or cables above the containment ceiling. The panels are heat sensitive and shrink away falling harmlessly out of the way once the temperature hits 135 degrees Fahrenheit.

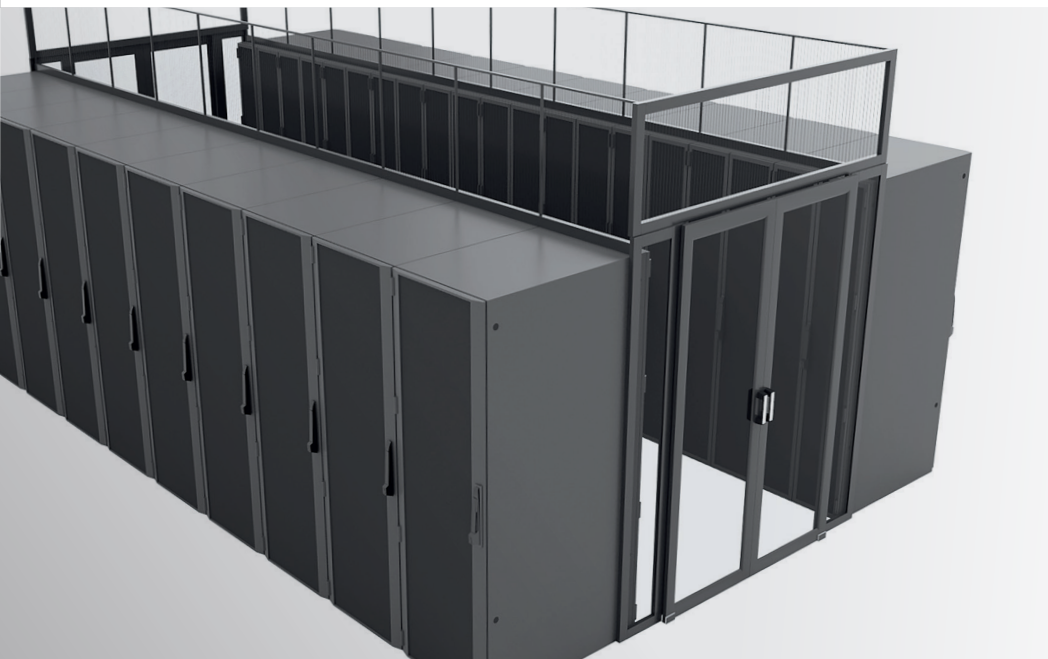
Vertical Baffle Panels



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Vertical Baffle Panels



The Cool Shield™ Vertical Baffle Panels are placed on top of server cabinets and extend to within 18" of ceiling to prevent recirculation of exhaust air to the cold aisle.

Vertical Baffle Panels allow data center managers to maximize the benefit from aisle containment without having to reconfigure the fire suppression system. A uniquely designed extrusion frame securely holds an 8mm panel vertically without any hardware. The frame can be secured to the top of a server cabinet mechanically or with disc magnets. Each frame can be sized to the cabinet width to make for modular and scalable implementation. Panels can also be custom-sized to width and height to accommodate rows which have different height server cabinets.

Features

- Effective containment without dealing with fire suppression concerns
- Very easy to configure and install without tools
- Custom-sized and pre-assembled for quick on-site installation
- Clear panels for high light transmission
- Mechanical and magnetic attachment options available
- Can be used for cold aisle or hot aisle containment

Specifications

- 2" x 1-1/2" aluminum frame provides high rigidity and durability
- Internal rubber seal holds panel tightly in place
- Standard 8mm twinwall panel has ASTM Class A fire rating
- Standard 1/2" foam gasket-to-cabinet allows install over screw heads and small cables
- Standard colors are black and silver
- Custom colors available

Strip Curtains



Armstrong®
World Industries



Strip Curtains



Features

- ASTM E84 Class A and UL® 94 VO rated strip material
- Unique channel bar allows navigating around cable trays, pipes, etc.
- Lightweight, clear material with low outgassing
- Mounting kits for ceiling grid, unistrut, cabinet tops, and threaded rod
- Optional fusible links allow strips (not bar) to fall before fire suppression releases

Specifications

- ASTM E84 Class A and UL® 94 VO rated strip material
- Lightweight, clear material with low outgassing
- 12", 14", 26", and 48" strip standard widths
- Multiple channel mounting methods including drop ceiling, struts, and beams
- Magnetic discs at overlap prevent separation of strips above server cabinets
- Weights minimize separation in aisle entry ways
- Can be used for hot aisle and cold aisle, dependent on system design

Create a cost-effective floor-to-ceiling partition wall to separate active from inactive spaces in the data center. Thick PVC strips were the first material used for aisle containment in the data center. They were inexpensive, easy to cut to adjust to obstacles and were quite effective at preventing air mixing. However, fire rating and outgassing concerns have forced a shift to a thinner, higher rated strip. The problem was that these lighter strips were less effective because they easily separated when faced with air pressure. The Cool Shield™ Flexible Strip solution overcomes these issues related to separation with a combination of magnetic discs, weights and floor angles.

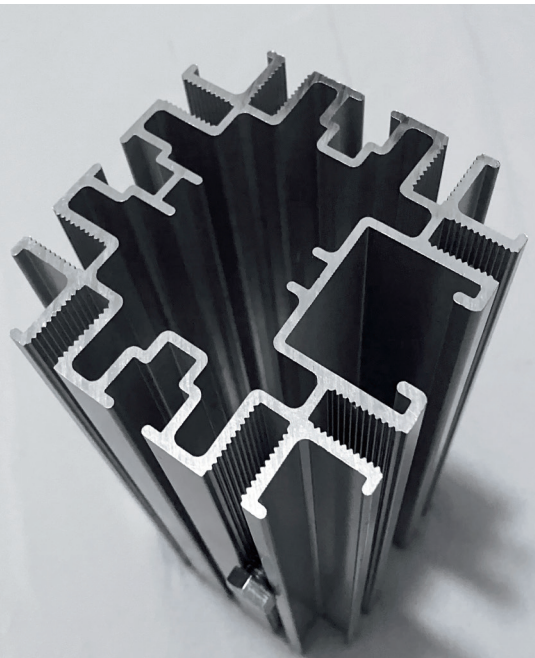
Cool Shield™ Structure



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Cool Shield™ Structure



Heavy-duty aisle containment structure designed to support critical infrastructure including cable trays, busbars and more. Cool Shield™ Structure is more than just an effective aisle containment system, it is a support structure for all of your server cabinet infrastructure. Unlimited configurability allows for systems to be customized for your unique application.

Features

- Heavy-duty 4" post frame provides strength to support weight without deflection
- All four sides feature multiple threaded channels for brackets and mounting
- One side of 4" post features an opening which accepts hardware for standard 1-5/8" strut
- Vertical support posts double as door frame for both sliding and hinged door systems
- Flanged P1000 or P1001 strut arms attach to vertical posts for sturdy support for busbars, cable trays or water piping
- Extrusion profile provides frame for fixed or sliding containment panels above servers

Specifications

- 4" X 4" frame system made from 6063-t6 aluminum extrusion
- Available in silver, black or white painted finishes
- Integrated strut profile accepts standard 1-5/8" (p1000) strut hardware fittings
- Optional pre-assembly of some framing components
- Structure extrusion tightly frames 8mm containment panels
- Flush mount filler panels easily attach to frame to seal empty cabinet positions

Modular Framed Containment Walls



Armstrong®
World Industries



Modular Framed Containment Walls



Features

- Rigid modular wall system custom-sized to each application
- Create smaller conditioned space to improve cooling efficiency
- Solid vertical containment to seal opposite single row cabinet
- Extrusion and panels cut to size for simple installation with hand drill

Specifications

- Heavy-duty 2" x 2' vertical and horizontal support beams
- Frame accepts 4mm and 6mm panels clear, opaque, frosted, or translucent panel options
- Frames available in silver or black – custom colors available

Typically, vertical posts run from floor to ceiling. Cross beams also frame out translucent, transparent, or opaque panels. This modular construction allows the walls to be as tall as 24 feet and have an unlimited length. Walls are typically supported at both the ceiling and floor for maximum stability. Cool Shield™ hinged or sliding doors can be integrated into the wall systems to allow for pass through.

Framed walls can also be used for containment aisles with a single row of cabinets. The containment wall creates a rigid seal on the opposite side in areas where cabinets could never be placed. The containment walls can be cabinet height in containment ceiling applications.

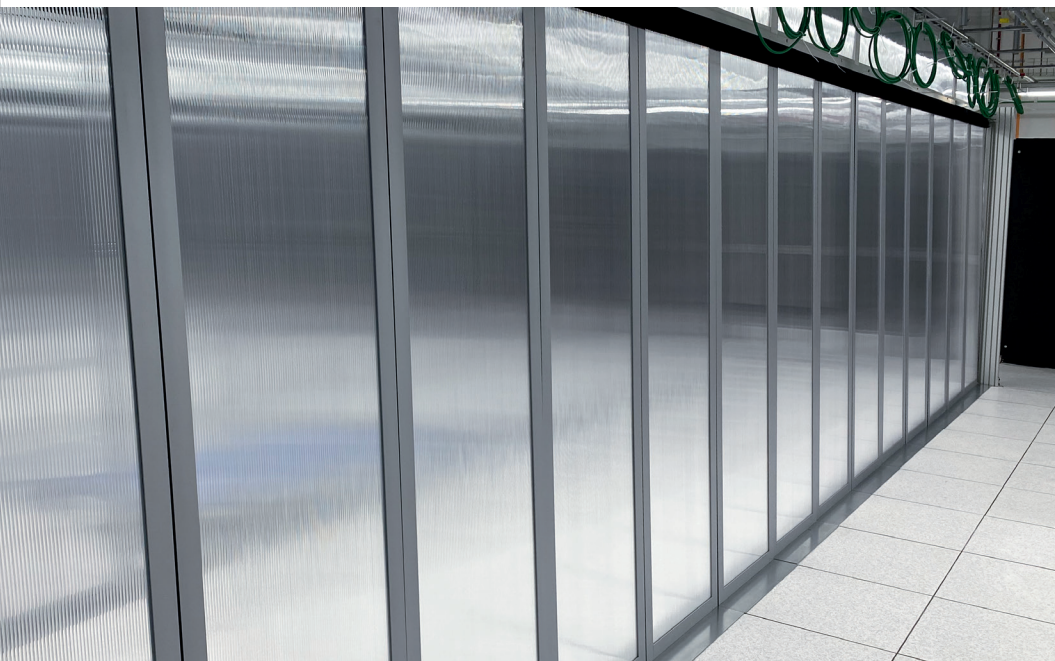
Cabinet Filler Panels



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Cabinet Filler Panels



Features

- Custom-sized to fill gaps between cabinets
- Create opposing wall for single row aisles
- Can be place holders for future row expansion
- Ideal for aligning opposing rows for use with aisle doors or ceiling panels
- Can be self-standing or attached to floor, cabinets, or containment system

Specifications

- Fills gaps in uneven rows
- Sized to be stand-in for server cabinets
- Pre-assembled in factory for easy deployment
- Multiple insert options including ASTM E84 Class A, UL 94, and FM 4910 fire ratings
- Threaded channel on back side allows for attachment to cabinets, doors, upper containment or floor

Framed panels keep aisles contained when missing cabinets or incomplete rows. Made to the size of cabinets, swap out as you add to rows. Most existing data centers are not perfect and have spaces between cabinets, different size rows, and other challenges to proper containment. Cool Shield™ Barrier Panels fill gaps in server rows to allow full containment of aisles which have missing cabinets, uneven rows, columns, or other openings. The barrier panels can square up rows so that hinged or sliding aisle end doors may be used. They can also be used as a low-cost opposing wall for single or “orphan rows”. Panels are constructed with the Cool Shield channel creating a frame for a clear or opaque insert panel. Specially designed feet allow the panels to be self standing.

Strip Curtain Walls



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Strip Curtain Walls



Features

- Overlapping strips cut to size to fill large or small gaps in containment
- Strips can be easily removed or cut when cabinets are deployed
- Optional removable mounting bracket attaches to Cool Shield™ channel
- Optional floor support to prevent separation due to air pressure
- Optional thermal release solutions

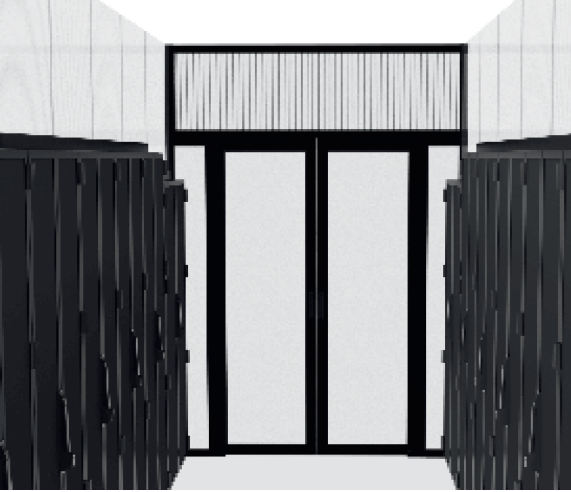
Specifications

- ASTM E84 Class A and UL® 94 V0 rated strip material meets NFPA 75 standards
- Lightweight, clear material with low outgassing
- 12", 14", 26", and 48" strip standard widths
- Multiple channel mounting methods including DynaMax® suspension ceiling, strut, and beams
- Support frame had integrated threaded channels which accepts standard 1/4-20 screws
- Magnetic discs, curtain weights or floor angles prevent air loss due to separation

Strip curtain walls are a cost-effective and easy to install option for sealing a large open spaces. They can be used to fill containment areas with no racks or separate areas of a data hall.

Overlapping flexible strip curtains can me mounted from the ceiling, containment system cabinet or other support. Support frame features threaded channel which accepts standard screws for rapid installation. Fusible links can be used to allow strips to fall in a fire event.

One disadvantage of strip curtains is they can easily separate due to air pressure. This can reduce the efficiency of the containment since this results in air leakage. Cool Shield can design your strip curtain solution with a combination of magnetic disks, curtain weights and floor angles to maximize efficiency.



Containment Accessories

Containment Cap

The Cool Shield™ Containment Cap solution provides cost-effective modular vertical containment to individual cabinets or entire rows.

Increasing server densities and power consumption are driving up utility bills. The Armstrong Cool Shield Containment slashes cooling costs with proven solutions to improve your energy efficiency. Managing the airflow around server cabinets is critical to prevent hardware from overheating. Our solutions to manage airflow include blanking panels, magseal floor barriers, CRAC hoods and Floor Grommets.

Cool Shield sliding and hinged aisle containment doors are attractive and resilient solutions for closing the entry to your hot or cold aisle. Door posts and headers are constructed of robust 2" x 2" tubular aluminum high strength and durability. The 3" door frames provide rock solid feel to both hinged and sliding doors. Each door features a generous clear insert to provide light and visibility into the aisle. Standard inserts are UL® 94 rated but inserts are also available in FM Global and ASTM E84 ratings.

Effectively seal the entries to hot or cold aisles with Cool Shield™ doors. Double, single, hinged, sliding, and strip configurations make building your aisle easy.



Single Hinged Door
Self-closing Hinges

- 84" and 90" Height
- 40" Width
- Custom sizes available
- Black or silver frame



Single Sliding Doors
Optional Self-closing

- 84" and 90" Height
- 40" and 50" Width
- Custom sizes available
- Black or silver frame



Double Sliding Doors
Optional Self-closing

- 84" and 90" Height
- 54", 64", and 74" Width
- Custom sizes available
- Black or silver frame



Overlapping Strip Curtain Doors

Overlapping vertical strips provide effective and efficient approach to sealing aisle entry way.



Blanking Panels
Individual & Kits

Rackfill blanking panels combine performance, versatility, and low cost in one innovative solution.



Magseal Gap Filler & Cabinet Floor Skirts

Block hot exhaust air from flowing under server cabinets to the cold aisle.



Floor Grommets

Designed to seal openings in new or existing raised floor cutouts used for communications or power cabling.



CRAC Hood

The Cool Shield CRAC Extension is designed to be a highly effective, customizable, and cost-effective solution for extending your cooling unit return up to the return plenum.

Single Hinged Doors



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Single Hinged Doors



The Cool Shield™ Single Hinged Door solution is ideal for smaller aisle ways which have adjacent obstructions such as cable trays or power cabinets. The single hinged doors feature self-closing hinges so that they will close behind you automatically after you enter the aisle. Robust aluminum post and frames provide high strength and durability. Doors close tightly to the frame and feature a magnetic catch to keep door in closed position even with high air pressure.

Features

- Self-closing hinges ensure doors are not left in open position
- Heavy-duty door frame for sturdy feel
- Threaded channels on post and header allow numerous securing options
- Metal or panel based side light options to extend doors for larger aisles
- Magnetic catch holds door in the closed position

Specifications

- Standard door heights of 84" and 90"
- Standard door width of 40"
- Custom sizes available
- UL® 94, ASTM E84 Class 1 and FM Global fire ratings available for clear insert
- Door designed to comply with ADA requirements
- Adjustable tension self-closing hinges
- Available in black and silver colors

Single Sliding Doors



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Single Sliding Doors



The Cool Shield™ Single Sliding Door is both highly functional and visually appealing for aisles up to 48" width. The doors feature a smooth operating slide rail with easy opening and closing. Optional self-closing piston prevents air leakage from doors being left open. Doors will hold in the fully opened position to allow for bringing equipment into the aisles.

Features

- Easy glide slide rails for smooth opening
- Holds In fully opened position for equipment loading
- Heavy-duty door frame for sturdy feel
- Threaded channels on post and header allow numerous securing options
- Metal or panel based side light options to extend doors for larger aisles
- Optional piston based self-closer prevents inadvertently leaving doors open

Specifications

- Standard door heights of 84" and 90"
- Standard door widths of 40" and 50"
- Custom sizes available
- UL® 94, ASTM E84 Class 1 and FM Global fire ratings available for clear insert
- Door designed to comply with ADA requirements
- Integrated hold open feature
- Optional hydraulic self-closing mechanism
- Available in black and silver colors

Double Sliding Doors



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Double Sliding Doors



The Cool Shield™ Double Sliding Door system is highly functional and cost-efficient for aisles up to 72" wide. The double sliding door system is designed for efficiency with a low-profile and smooth operation. Most importantly, it seals the end of aisle entryways to prevent supply and exhaust air from mixing. Doors arrive fully assembled for quick and on-site installation.

Features

- Easy glide slide rails for smooth opening
- Holds In fully opened position for equipment loading
- Heavy-duty door frame for sturdy feel
- Threaded channels on post and header allow numerous securing options
- Metal or panel based side light options to extend doors for larger aisles
- Optional piston based self-closer prevents inadvertently leaving doors open

Specifications

- Standard door heights of 84" and 90"
- Standard door widths of 54", 64", and 74"
- Custom sizes available
- UL® 94, ASTM E84 Class 1 and FM Global fire ratings available
- Door designed to comply with ADA requirements
- Integrated hold open feature
- Optional hydraulic self-closing mechanism
- Available in black and silver colors

Double Hinged Doors



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Double Hinged Doors



Features

- Self-closing hinges ensures doors are not left in open position
- Heavy-duty door frame for sturdy feel
- Threaded channels on post and header allow numerous securing options
- Metal or panel based side light options to extend doors for larger aisles
- Seal between doors to prevent gap and eliminating air loss

Specifications

- Standard door heights of 84" and 90"
- Standard door width of 54" and 64"
- Custom sizes available
- UL® 94, ASTM E84 Class 1 and FM Global fire ratings available for clear insert
- Door designed to comply with ADA requirements
- Adjustable tension self-closing hinges
- Available in black and silver colors

The Cool Shield™ Double Hinged Doors are a great option for 48" and wider doors where there are obstructions or access requirements next to the doors. Doors are equipped with heavy-duty self-closing hinges which help ensure doors will not be accidentally left open. Robust door posts and full 3" door frames provide a solid feel with high strength and durability. Posts have integrated threaded channels to allow for multiple mounting options including the floor, cabinets, and overhead. Magnetic catch provides a solid seal in the closed position.

Strip Doors



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Strip Doors



Features

- Very cost-effective solution for aisle entries
- Extra wide strips provide increased overlap to prevent separation
- Optional strip weights prevent curling and flapping
- Clear flexible strip material meets NFPA 75 standards
- Stand alone door or integrate with upper aisle containment solution

Specifications

- ASTM E84 class A rated strip material
- Unique channel bar allows navigating around cable trays, pipes, etc.
- Lightweight, clear material with low outgassing
- Mounting kits for ceiling grid, unistrut, cabinet tops, and threaded rod
- Optional fusible links allow strips (not bar) to fall before fire suppression releases
- 12", 14", 26", and 48" strip standard widths
- Magnetic dots prevent strip separation above cabinets
- Curtain weights prevent long curtains from flapping due to air pressure

Overlapping vertical strips are the most cost effective approach for aisle containment doors. The problem is that if not properly configured, they can be very ineffective. The thin, lightweight strips approved for use in data centers can separate and flap due to air pressure. However, the Cool Shield™ Strip Doors are designed to minimize separation for an efficient and effective aisle door solution. Cool Shield Strip Doors use wider strips than the competition to allow for a full 3" overlap. This extra overlap does not prohibit entering the aisle but does help prevent separation.

Rackfill Blanking Panels



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Rackfill Blanking Panels



Features

- Multiple mounting options including magnets and push-in clips for round and square hole rails
- Rigid, lightweight material does not sag to maintain tight seal between panels
- Perforated in 1U increments to allow easy cutting to size when new hardware is added
- Specially formulated resins achieve exceptional fire rating exceeding NFPA data center standards
- Available for both 19" and 23" rackmount widths

Specifications

- E84 Class A fire rating exceeds NFPA 75 and 76 data center standards
- Available in 42U, 44U, 45U, 46U, 47U, 48U, 51U and 54U kits for sealing empty cabinets
- Standard panels are for 19" rackmount – 23" rackmount available upon request
- Standard colors are black and white, custom colors upon request
- Each 1/32" thick magnetic disc has pull force of 2.1 lbs.

Rackfill blanking panels combine performance, versatility, and low cost in one innovative solution. Panels can ship with your choice of three mounting options: 1) Push-in clips for round hole (telecom) mounting rails, 2) Push-in clips for industry standard square hole mounting rails, and 3) Ultra-thin high-performance magnetic discs which will adhere to any steel mounting rails. All options allow data center managers to quickly install lightweight yet rigid panels to fill empty rack spaces in literally seconds. Rackfill panels are available in 1U to 27U sizes. All panels feature perforated scores in 1U increments to allow the panels to be quickly and accurately cut to any size needed as hardware is added. Panels can be cut in seconds with a common utility knife or scissors.

Magseal & Cabinet Floor Skirts



Armstrong®
World Industries



BEFORE



AFTER



Magseal & Cabinet Floor Skirts



Features

- Block hot exhaust air from flowing under server cabinets to the cold aisle
- Maximize effectiveness of aisle containment investment
- Panels install in seconds
- Panels can feature magnetic or mechanical attachment to cabinets
- Custom-sized to your server cabinet and gap sizes

Specifications

- Fire-rated foam board material is ASTM E84 Class A rated
- Optional magnetic disc attachment for strong hold and rapid installation
- Optional slotted holes for bolt-on attachment based on cabinet model
- Available in black or white to match most server cabinets
- Custom size and color options available

Data center managers who are serious about maximizing their cooling efficiency know that using blanking panels in unused rack spaces is critical for aisle containment. An overlooked final step in efficiency is sealing the space under server cabinets. Data centers that incorporate hot and cold aisle containment have pressure differentials between the aisles. This pressure can cause the gap below server cabinets, which is often 2" or more, to become an air stream between hot and cold aisles. The resulting mix of air reduces the effectiveness of a containment solution.

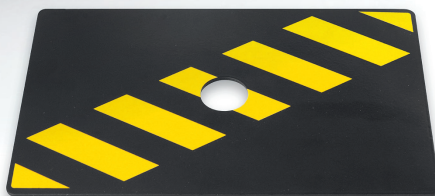
Floor Grommets



Armstrong®
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Split Brush Grommets



Grommet Covers



Split Round Grommets

40



Split Raised Grommets



Extended Brush Grommets



Mini Brush Grommets

Floor Grommets



Designed to seal openings in new or existing raised floor cutouts used for communications or power cabling. Based on measurements at multiple data centers, on average 48% of valuable conditioned air is not reaching the air intake of IT equipment due to unsealed floor openings. This lost air, known as bypass airflow, contributes to IT equipment hot spots, cooling unit inefficiencies, and increasing infrastructure costs. KoldLok® products specifically address bypass airflow and its detrimental effects on data center cooling.

Features

- Increased ability to remove and replace tiles with edge cuts
- Reduced installation labor
- Ability to custom label grid location or cabinet identification
- Improved lifespan due to higher impact material
- Quick removal under low height cabinets due to interlocking design
- Easier to clean

Specifications

- Supports increased cabinet density
- Increases existing cooling unit capacity
- Reduces the need to purchase additional cooling units
- Improves IT equipment reliability and extends equipment life – increases static pressure under the raised floor and improves cool air delivery through perforated tiles and floor grates
- Compliance with best practices for all raised floor cooling configuration (hot and cold aisle, hot aisle containment, cold aisle containment, etc.)

CRAC Hoods



Armstrong®
World Industries



CRAC Hoods



Features

- Achieve higher Delta T of supply and return air for high efficiency
- Modular design allows for customized size
- Sliding panels allow for accessing and replacing air filters
- Significant cost advantage
- Improve performance of containment aisles

Specifications

- Can be configured for any Liebert®, Stulz, DataAire or other CRAC/CRAH manufacturer
- Lightweight aluminum frame with high thermal performance inserts
- Inserts have E84 Class A fire-rating and exceed NFPA 75/76 specifications
- Sliding panel access area exceeds vendor size requirements
- Gaskets at top and bottom seal air and allow for variable site conditions

The Cool Shield™ CRAC Extension is designed to be a highly effective, customizable, and cost-effective solution for extending your cooling unit return up to the return plenum. Creating this direct connection allows the cooling unit to receive warmer air which provides significant benefits for your data center cooling. Higher return temperatures can improve cooling capacity and efficiency. The capacity of a cooling unit can vary significantly based on the return temperature. For example, the actual capacity of a 50-ton cooling unit can range from 20-tons to 70-tons based on the return temperature provided. Studies have shown a 10-degree increase return air temperature to cooling unit can result in up 30% capacity increase.

How Can We Help You?

Experience,
Above All™

Contact Us:

datacentersales@armstrongceilings.com

TechLine – Custom reverberation and privacy index calculation reports, technical information, detail drawings, CAD design assistance, installation information, other technical services – 8:00 a.m. to 5:30 p.m. EST, Monday through Friday.
FAX 1 800 572 8324 or email: techline@armstrongceilings.com

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A Ceiling for Every Space® Visual Selection Tool

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